MI SHA NEWS

Vol. 4, No. 3 | Michigan Occupational Safety and Health Act (MIOSHA) | Summer 2000

Safe Summer Celebrations

Across hundreds of communities in Michigan this summer, fireworks displays will provide an exciting conclusion to local festivities. However, as recent events have shown, fireworks are highly unstable and must be stored, transported and displayed with extreme caution.

The devastating fireworks warehouse explosion in the Netherlands on May 13, 2000, which killed at least 20 people and injured more than 600, has grimly reminded all professionals who handle fireworks their first priority must be safety.

The Michigan Department of Consumer & Industry Services (CIS), under the leadership of CIS Director **Kathy Wilbur**, is making a concerted effort to alert communities to the potential dangers involved in fireworks displays, and to help them prevent fireworks-related tragedies during local summer celebrations.

Bay City fireworks display. (Photo by Dan Tomczak)

"Improper handling of explosives can have serious consequences," said CIS Director Kathy Wilbur. "CIS is committed to providing the necessary tools to local communities to provide safe fireworks celebrations for their citizens."

The CIS Bureau of Safety and Regulation is responsible for administering the Michigan Occupational Safety and Health Act (MIOSHA). MIOSHA hosted a special seminar, **Safety Seminar for Fireworks in Municipalities**, on May 10th in Bay City. Response was so overwhelming to the original seminar that MIOSHA added a second session on May 31st. MIOSHA co-sponsored the seminar with the Bay City Fire Department and Bay City Firefighters Local 1435.

"The hazards associated with fireworks and fireworks displays are significant," said MIOSHA Director **Doug Earle**. "We are holding this seminar to help ensure that communities have the information and training necessary to protect workers, volunteers, and spectators during fireworks demonstrations."

This special safety seminar provided valuable information on how to provide fireworks demonstrations that are not only entertaining, but safe, for the general public. The seminar also covered how to provide a safe working environment for the professionals and volunteers putting on the displays.

"The Bay City Fire Department is proud to co-host this seminar," said Bay City Fire Marshal **Michael Halstead**. "It is through education, after all, that we minimize the dangers inherent in the handling of fireworks."

Lee Jay Kueppers, a safety consultant with the Consultation Education & Training Division (CET) coordinated the seminars. According to Kueppers, several serious accidents and explosions during fireworks displays in Michigan communities, have caused local officials to seriously examine their safety efforts. In June 1999, MIOSHA conducted a special seminar for fireworks manufacturers, which prompted several municipalities to request this specialized training from MIOSHA covering fireworks displays.

Bay City produces one of the largest fireworks displays in the state. In 1990, there was a dangerous explosion during their display that

Cont. on Page 17

In This Issue

CIS

Serving Michigan . . . Serving You
Consumer and Industry Services

From the Bureau Director's Desk

By: Douglas R. Earle, Director
Bureau of Safety & Regulation

Happy Anniversary MIOSHA 25 Years!

"Celebration Time Is Here"

Did you know that July 1, 2000, is the 25th Anniversary of the Michigan Occupational Safety and Health Act (MIOSHA)? If you said "yes," you would be half right. Be honest now–did you really remember that MIOSHA, when enacted in 1974, was provided with two different effective dates? January 1, 1975, for private-sector employers and July 1, 1975, for public-sector employers.

Do you know why there were two separate effective dates for MIOSHA requirements?

A political "deal," you say. Well, yes, all legislation that is successful represents political accommodations to some degree. In most cases there are good reasons for the political accommodations, and the differing effective date "deal" is no exception.

Indeed, Governor Milliken signed Senate Bill 698 on June 18, 1974, which became Act 154 of 1974. The legislature gave it "immediate effect" for the private sector on January 1, 1975, but deferred application of the requirements until July 1, 1975, for the public sector. The delay was deemed essential for public employers, who had not been previously covered by federal OSHA safety and health requirements, to comply with all the federal safety and health standards that were being adopted by reference under the new law.

On the afternoon of Monday, June 26th, 2000, at a bureau meeting for all employees, we commemorated the 25th anniversary of MIOSHA. A number of people who played significant roles regarding worker health and safety during the past 25 years were invited to return for the program and a reception afterwards. Some were asked to speak and provide their unique perspectives on MIOSHA.

Governor John Engler issued an Executive Declaration congratulating MIOSHA on 25 years of dedicated public service in protecting Michigan workers and promoting safe and healthful workplaces. The Governor applauded MIOSHA's efforts to work cooperatively with Michigan employers to identify problem areas and seek practical solutions.

From the beginning, the focus of the MIOSHA program has been to help assure a safe and healthy workplace for every Michigan worker. MIOSHA has worked diligently to help reduce workplace injuries, illnesses and fatalities, while at the same time emphasizing the message to employers and employees that workplace safety and health makes good business sense. We are proud of MIOSHA's long history of committed service to the safety and health of Michigan workers.

MIOSHA Management Reorganization of Consultation Education and Training Services

In keeping with the spirit of providing readers of the MIOSHA News with a special heads-up regarding significant program changes, I want to announce a recent major reorganization in the MIOSHA program. The management responsibilities for MIOSHA consultation, education, and training services have been consolidated under one division. The SET (Safety Education & Training) Division has been combined with the consultation, education and training units of the Occupational Health Division–to form the new CET (Consultation, Education and Training) Division. CET Division Chief, Maryann Markham, is responsible for all MIOSHA health and safety consultation, education and training services.

While I have a number of expectations regarding the future of our CET services, among them is the expectation that the consolidation of the management structure will be of significant help in obtaining one of our major goals of providing "seamless" service to employers and employees concerning workplace health and safety. In addition, my expectation is that the services will be more accessible, while at the same time we will continue the high quality of services.

New MIOSHA General Industry Inspection and CET Services Scheduling Systems

In another area of the MIOSHA program, we will soon be implementing a new inspection scheduling system for compliance staff in the General Industry Safety Division. The program will be based upon multiple data sources, including workers' compensation information. The new program should enable us to target those establishments for investigations that are having the most problems and avoid inspecting those establishments that are providing a safe and healthy work environment.

We will also use this combination of data services to better reach worksites whose safety and health practices need improvement, and who wish to avail themselves of our CET services. There will be more detailed information on the new scheduling systems in future editions of the MIOSHA News.

Douglas R Earle

Anatomy of an Accident:

Construction Safety Requires Responsibility

By: Richard J. Mee, Chief
Construction Safety Division

"The significant problems we face cannot be solved at the same level of thinking we were at when we created them." Albert Einstein

When my four children were in school, on their first day back to classes each semester, I would remind them that they were starting with a four-point grade average. I explained that on that first day they had an "A" in each class. This, I reasoned, was because there were no marks on their new record less than an "A" to lower the average. It was stressed to each child that any change in their grade would occur only because of something they decided to do or decided not to do. The point to this was to make excellence the paradigm, the default, the goal to which to aspire.

My efforts did not result in children who achieved a perfect grade report. Although they all came to love learning and achieved their own degree of academic success, none of my children were great scholars. They all knew my yearly admonition was only intended to remind them to take responsibility for the results of their actions. A point was made, however, and a lesson learned that would outlast their formal educational experience. None of us in any endeavor should think we have all the knowledge we need, and excellence or even improvement comes only if we take responsibility and work at it.

Construction of the DEQ building in Lansing.

Where Are We Going with This?

That principle applies to construction safety and health. The construction culture historically has been one of strong individualism, tempered by the ability to work together with other craftspeople to successfully complete projects on time. Another major attribute of the construction worker has been the innovation necessary to perform their challenging tasks, even without all of the proper tools and equipment that should be on hand in the perfect world. Until relatively recently, construction accidents, even deaths, were commonly accepted in the industry as a consequence of performing rough work under less than ideal conditions.

There is no argument that construction work presents grave dangers. By the very nature of the construction environment, workers are commonly exposed to such hazards as falls from heights, electric wires, heavy materials, powerful machinery, excavations, and confined space environments. Add to these perils the continuously changing conditions that are inherent to the very process of construction and the resultant mix is fertile ground for accidents. There is little mystery to the horrible statistics that have accumulated in the honorable construction profession.

Do the Math

Typically, construction workplace deaths resulting from MIOSHA program-related accidents amount to about 40 percent of all program-related workplace deaths in Michigan. The construction industry share of the workforce, however, is only about four percent. Do the math–the resultant conclusion is that, on average, it is about ten times more dangerous, in terms of dying in a workplace accident, to be a construction worker.

These facts beg the question: Why? Aren't there heavy materials and powerful machines in manufacturing plants? Isn't there exposure to falling in many other businesses? Don't power plant workers have exposure to electric wires? How do chemical plant and refinery workers cope with the confined spaces in their industries? Why construction? The answers, like the solutions to the problems, are complex.

Anatomy of an Accident

Let's start to look at the solution by examining the problem. One unique facet of construction work is the constantly changing conditions. By definition, as a structure is constructed, the conditions are changing. A recently poured fourth floor concrete deck, for example, had perimeter guardrails installed and presented no fall hazards. Then, in preparation to build the elevator shaft

Cont. on Page 19

Give 'em a Brake

Slower Speeds Save Lives

It's summer in Michigan–and that means road construction.

As Michigan's construction workers roll out the orange barrels this season, the state is pledging to crack down on speeders and enforce safety rules.

Pay attention, or you'll pay the price! Look for signs letting you know of approaching construction zones. If you're caught speeding, your fines will be doubled.

Every year there are more than 2,000 injuries in Michigan work zone accidents. Don't become a statistic! Please remember: construction workers are fathers and mothers, sons and daughters, just like you. Speeding motorists put themselves, their passengers, and workers at risk.

So...this summer, watch out for road construction and when you see workers, please slow down. Let's keep it safe for everyone. **Give 'em a Brake!**

Top Ten Tips for Driving in a Work Zone

1) Slow down! Slower Speeds Save Lives.

2) Turn on your headlights in work zones.

3) Put down the cell phone.

4) Turn your radio down.

5) Don't eat or drink.

6) Keep both hands on the wheel.

7) Don't drive aggressively.

8) Obey work zone directions. Merge early.

9) Watch for work zone activity.

10) Pay extra attention driving thru work zones after dark.

Congratulations Tenneco Automotive!

Tenneco Automotive's Grass Lake Engineering Center is only second in state to receive MVPP Star Award

Tenneco Automotive's Grass Lake Engineering Center has become the second company in the state to receive a Michigan Voluntary Protection Programs (MVPP) Star award for workplace safety and health excellence. CIS Deputy Director **Dr. Kalmin Smith** presented the Star flag to employees at a ceremony Friday, May 19, 2000, on behalf of the Michigan Department of Consumer & Industry Services (CIS).

"I am honored to present this premiere safety and health recognition to the employees and management of the Grass Lake Engineering Center," said Dr. Smith. "We applaud the safety and health leadership exhibited at this facility. Your commitment is proof that focusing on safety up front is a sound business decision."

The MVPP Star

The CIS Bureau of Safety and Regulation is responsible for the Michigan Occupational Safety and Health Act (MIOSHA) program. MIOSHA established the MVPP program to recognize employers actively working toward achieving excellence in workplace safety and health. It was developed in 1996 to reward private- and public-sector work sites that develop and implement outstanding safety and health programs beyond MIOSHA standards.

"Companies that establish an integrated safety and health program reap the benefits of dramatically reducing their injury and illness rates," said CIS Director **Kathy Wilbur**. "Tenneco Automotive's outstanding safety and health record sends a strong message to all employers that safety pays."

The MVPP Program enhances MIOSHA's tradition of working cooperatively and voluntarily with industry to reduce and eliminate workplace injuries and illnesses. The two components to the MVPP Program include: the Star Program and the Merit Program.

The Celebration

Employees raised the MVPP Star flag during the ceremony. Accepting the Star award were: **Timothy Jackson**, Senior Vice President and General Manager, North American Original Equipment & Worldwide Program Management, Tenneco Automotive Inc.; **Paul Jenkins**, Grass Lake Facility Manager; **Jeanie Issac Phebus**, Grass Lake Environmental, Health & Safety Coordinator; and **Doug Hopkins**, UAW Local 660 Vice President.

"Safety is a top concern at Grass Lake and the results are clearly wonderful," said **Tim Jackson**. "The most recent injury-illness rate for other companies in our industry in the state was 7.1, compared with 2.0 for Grass Lake. In terms of lost workdays, Grass Lake had a rate of 0.4, compared with 5.1 for similar companies in Michigan. The attentiveness to safety at Grass Lake assures that we protect our most important resource – our people."

State and local elected officials, corporate and union leaders, as well as CIS and MIOSHA representatives, were on hand to congratulate the Grass Lake Engineering Center representatives on their outstanding achievement. Brad Biladeau read a letter of commendation from U.S. Representative Nick Smith. Denise Owens presented a proclamation from Michigan Representative Mickey Mortimer.

Dr. Kalmin Smith (center) presents the Star Award to (from L.) Paul Jenkins, Jeanie Issac Phebus, Doug Hopkins, and Tim Jackson.

Raising the Star Flag at Tenneco Automotive.

The MVPP Site Review

The Standard Industrial Classification (SIC) code for this facility is 3714, "Automotive Parts and Accessories." The operation focuses on research, design and testing of automotive exhaust prototypes for original equipment and after-market applications.

An onsite review is conducted to determine whether the site meets the eligibility requirements for participation in the MVPP Program. The MIOSHA MVPP onsite review team consisted of **David Luptowski**, Occupational Safety Consultant, Team Leader, and **D.W. Johnson**, Certified Industrial Hygienist. The MVPP Site Coordinator for Grass Lake was **Joe Keenan**, Health and Safety Coordinator (now retired). The Grass Lake team consisted of management representatives and union officials.

The MIOSHA team conducted the MVPP onsite health and safety review Sept. 20 - 22, 1999. The review consisted of: formal and informal interviews of management personnel, test technicians, and model builders; a site walk around; observation; fact-finding discussions; meetings with the Partners in Safety Awareness Team; and briefing sessions with representatives of management and employees.

The injury-illness rate at Grass Lake for their SIC Code was 3.2 for 1996, 2.7 for 1997, and 2.0 for 1998–which is significantly below the Michigan rate of 21.6 for 1996, 19.3 for 1997, and 7.1 for 1998. The lost workday case rate for Grass Lake was 0.4 for 1996, 1.3 for 1997, and 0.4 for 1998, which is again well below the Michigan rate of 9.5, 7.3, and 5.1 respectively.

"There was definitely a concern for safety on the part of every employee," said Luptowski.

Cont. on Page 19

Crisis Intervention

Organizational Response after Critical Incidents—Part Three in our Workplace Violence Series.

By: Marilyn Knight, MSW, President
Incident Management Team

Oklahoma City Bombing. Employee Crushed in Industrial Accident. Angry Spouse Kills Estranged Wife–Then Shoots Self in Plant Parking Lot. Employee Finds Co-Worker Slumped Over Desk From Heart Attack. Shooting Incident at Post Office.

What do all of these have in common? They are traumatic for those involved and are referred to, collectively, by the term "critical incidents." Not only are they traumatic for the individuals directly involved in the event, but also for the people who witness the event, are responders to it, as well as co-workers, friends, and families.

While most employers have disaster plans that deal with the physical restoration of their facility, few have developed strategies to assist employees who have survived, witnessed, been injured or otherwise had to deal with such events. Post-incident crisis response planning is a means for reducing the impact of trauma on the individuals affected, as well as restabilizing the organization after a traumatic event.

The process of developing crisis response plans is becoming a priority of progressive organizations because it's consistent with management philosophies affirming the value of the employee as integral to the organization. Moreover, the deployment of crisis response teams is a sign of loyalty and commitment to the safety and well being of employees who have experienced trauma in the course of their employment.

Critical Incidents Defined

Critical incidents are defined as events outside of the range of normal human experiences which would be distressing to almost anyone. These events often have consistent characteristics in terms of their impact. During critical incidents, people are often overwhelmed with a sense of vulnerability and/or lack of control over the situation. The incidents are life threatening in nature, and have the potential for interfering with a person's ability to function.

Critical incidents may be caused by 1) natural phenomena, 2) technological accidents or 3) man-induced events. Natural phenomena include: earthquakes, floods, tornados, storms, and other forces of nature. Technological critical accidents include events such as: fires, explosions, worksite accidents, maiming incidents, falls, and auto accidents. Man-induced critical incidents include deliberate acts of violence or harm, such as: assaults, rapes, shootings, stabbings, and homicides.

Initially, the physical, emotional and psychological reactions to any of these events is essentially the same. However, in the long run, technological and man-made critical incidents seem to have a more significant impact upon people and are more difficult to overcome.

Crisis Reactions

After witnessing, being victimized or living through such experiences, people go through three stages of emotional and physical reactions known as crisis reactions. **Stage one** is often accompanied by feelings of shock, disbelief, denial and/or numbness. Because the event is so far outside of the range of normal experience, people have no frame of reference by which they can either process or relate to the event. Denial or numbness, therefore, allows the person the opportunity to start processing the incident without getting emotionally overwhelmed. This stage can last a few seconds, minutes, hours, or days.

The aftermath of a critical incident can cause some people to experience a sense of loss. Their sense of safety and security about the predictability of life, which they had before the incident, is shattered. Moreover, after seeing death or a life-threatening event, people are compelled to confront their own mortality and vulnerability.

Stage two is called the impact stage. The person experiences the impact of the event–the incident becomes very real to them. The impact stage occurs within 24 to 48 hours, after the person has had time to think about the details of the event, its implications, and how it has changed their life. This stage may last several days to several weeks.

The **third stage** of a crisis reaction is often characterized by the construction of a new identity. The person goes through a series of ups and downs because the old identity has been decimated by the incident. After critical incidents, people experience a wide rage of emotional reactions including anger, helplessness, self-blame, confusion, guilt, anxiety, fear and/or powerlessness. Ultimately, the goal is for the individual to reach closure, enabling them to successfully put the experience behind them.

This does not mean they will forget the experience, for this is not possible. Rather, the person is able to process the event and the impact it had, allowing them to regain control of their life. It will always be stored in their long-term memory and may reappear, but much less powerfully, throughout their life. Critical incidents can act as a trigger for people to recall, and to some extent, relive previous traumatic incidents. While this is to be expected, it is helpful for people to know and understand it may happen. Otherwise they may become overwhelmed and think they are going crazy or are out of control.

There is also the phenomenon of **cumulative stress** which occurs from: exposure to a number of critical incidents, or exposure to an incident of an extended duration.

Factors which Influence Intensity

There are some predictable reactions and symptoms that occur in the aftermath of critical incidents. These are experienced in varying degrees by different people. Some people may have very intense reactions while others may have little or no outward reactions. It is hard, if not impossible, to predict which individuals will have intense reactions to critical incidents.

Emergency personnel respond to the Northwest Airlines crash of August 1987, one of the worst airline disasters in U.S. history.

There are a variety of factors which may influence the degree of trauma or dysfunction a person may have. The incident's location on the range of human experience is one factor. The person may also have a buffer, because previous exposure to trauma may inoculate the individual to handle the current painful event. For example, after a plane crash in Michigan, crisis response workers noticed different degrees of traumatic reaction among first responders to the

Cont. on Page 18

Blood Lead Levels
Among Adults in Michigan

By: Kenneth D. Rosenman, M.D., Professor of Medicine, Michigan State University
Amy S. Sims, ABLES Program Coordinator, Michigan State University
John H. Peck, CIH, Chief, Occupational Health Division, BSR, CIS

Elevated blood lead levels remain a health concern among Michigan residents. Since 1978, Michigan has required clinics, labs, hospitals, and employers to report any patient with a known or suspected work-related disease, including lead poisoning, to the Michigan Department of Consumer and Industry Services (CIS), formerly the Michigan Department of Public Health prior to April 1996. From 1992 through 1997, laboratories performing blood lead analyses on Michigan residents, including children, **voluntarily** submitted reports of blood lead levels to the Michigan Department of Community Health (DCH). New regulations that became effective October 11, 1997, **require** laboratories to submit reports of both adults and children to the DCH for any blood testing for lead.

Workers are constructing an enclosure to contain lead-based paint dust during abrasive blasting of the bridge.

ABLES Program

Coincident to this, CIS received federal funding in 1997 from the Centers for Disease Control and Prevention (CDC) to monitor adult blood lead levels as part of the Adult Blood Lead Epidemiology and Surveillance (ABLES) Program. The second annual report on the surveillance of blood lead levels among Michigan adults is now available. As of January 2000, 28 states have established lead registries through the ABLES Program for surveillance of adult lead absorption, primarily based on reports of elevated blood lead levels from clinical laboratories. Six additional states fund similar surveillance programs.

In Michigan in 1999, 10,442 reports on blood lead levels were received for 9,484 individuals at least 16 years of age. This was 3,508 more reports than were received in 1998, or a 50.6 percent increase. The number and percent of individuals with blood lead levels greater than or equal to 25 mg/dL decreased from 303 (4.8 percent) in 1998 to 273 (2.8 percent) in 1999.

Additionally, the number and percent of individuals with blood lead levels greater than or equal to 50 mg/dL decreased from 31 (0.5 percent) in 1998 to 11 (0.1 percent) in 1999. This equals a 76 percent reduction in the rate of Michigan adults with highly elevated blood lead levels from the first year of reporting to the second year. We are encouraged both by the increased compliance with the reporting law and the reduction in more highly elevated blood lead levels.

Conditions of Lead Exposure

Occupational exposure was the predominant source of lead exposure in Michigan adults. These exposures typically occurred where individuals were casting brass or bronze fixtures, repairing car radiators, or performing abrasive blasting on outdoor metal structures such as bridges, overpasses, or water towers. Another common but less frequent exposure occurred at shooting ranges.

Lead and dust fumes are serious hazards for Michigan workers who are overexposed to them. Unlike many metals, lead serves no biological function. Lead can be readily absorbed and distributed throughout the human body by inhalation and to a lesser extent by ingestion. Symptoms of chronic exposure may include anxiety, headaches, tremors, excessive tiredness, and other symptoms of damage to the nervous system. Both men and women can suffer from anemia, kidney damage, and reproductive effects. Additionally, women are susceptible to sterility, birth defects, and miscarriages. Children may experience other adverse effects related to developmental toxicity and a reduction in IQ, hearing, and growth.

Employer Responsibility

According to MIOSHA lead standards in General Industry and Construction, employers are required to protect workers from harmful lead exposure. This includes making sure the lead concentration in the air doesn't exceed the PELs. Employers must monitor air levels and implement engineering controls where needed. Where necessary, employers must provide protective clothing and appropriate housekeeping and hygiene facilities. They are also required to provide a medical surveillance program and conduct training programs for employees. For a complete copy of the lead standards, contact the Standards Division at 517.322.1845, or visit the MIOSHA website at: www.cis.state.mi.us/bsr.

Workplace follow-up at 35 companies where individuals worked, with blood lead levels greater than or equal to 25 mg/dL, showed that 24 of 35 establishments (69 percent) were in violation of a MIOSHA lead standard. Initial evaluation of these inspections shows them to be effective relative to other types of workplace inspections and suggests that they play a role in helping to reduce blood lead levels. We will continue to evaluate and follow this trend to determine if the initial findings remain over a more prolonged period of time.

Reports Available

The second year of operation of an adult blood lead surveillance system in Michigan proved successful in continuing to identify a large number of individuals with elevated blood lead levels and sources of workplace exposures that could be remediated to reduce lead exposure. Ongoing surveillance in future years will determine if the favorable trend in lower blood lead levels found between 1998 and 1999 will continue.

If you would like to view or download the full 1999 report on blood lead levels among Michigan adults, visit http://www.chm.msu.edu/oem/index.htm, or call 517.353.1846 to request a copy. Additional annual reports are available on occupational diseases, silicosis, work-related asthma, and noise-induced hearing loss in Michigan for 1999 and recent years. ■

The Bottom Line

Workplace Safety and Health Makes Good Business Sense

Blue Water Plastics, Inc.

Blue Water Plastics Company was founded in 1954 by **Christian Haas** in St. Clair, Michigan. Under his creative management, the company quickly grew from its original building to become a leader in custom plastic molding and assemblies. **Carl Haas** assumed leadership in 1979, and initiated an aggressive expansion plan.

Today the company has Corporate Headquarters & Technology Center in Marysville, seven injection molding plants in Southeastern Michigan, a blowmolding plant in Caro, joint ventures in Mexico and Germany, and an Engineering/Marketing Office in Troy. They employ 1,250 workers in the U.S.

They are a major automotive supplier and among their many products, they produce HVAC ducts, module components and subsystems; interior and exterior trim; underhood components; body air exhausters; B.I.W. components (shields, covers, barriers, etc.); and fuel system components. Their automotive clients include: General Motors, Ford, DaimlerChrysler, Delphi, Visteon, Johnson Controls, Lear, Nissan, Volkswagen and Mitsubishi. Their 1999 sales were in excess of $136 million.

Standard of Excellence

The mission of Blue Water Plastics, Inc. is to provide high quality plastic products to worldwide markets where their experience and unique competencies will give them a competitive advantage. They are committed to utilizing advanced technology to manage the design and manufacture of plastic components and assemblies that add value to their customer's products.

The company is dedicated to maintaining its tradition of high ethical standards, concern for the personal growth and well being of their employees, and commitment to their industry and community. For the business to operate successfully, the company believes the cooperation of all employees working together as a team is essential.

To continue to meet the automotive challenge of the future, Blue Water has made a dedicated commitment to the production of quality parts, in addition to an ongoing program of equipment modernization. All of their facilities are QS-9000 certified. In 1997 and 1998, they were the recipient of the General Motors "Supplier of the Year" award. Of 30,000 suppliers to GM, only 180 received this award. They are also certified Q1 by Ford and Gold Pentastar by DaimlerChrysler at all facilities.

Employee & Safety Commitment

Timothy J. Koury, Corporate Safety Director and **Carrie Barrette**, Corporate Safety Assistant, are responsible for the firm's safety, health and environmental issues, as well as the worker's compensation and wellness programs. Blue Water Plastics' safety program has been recognized as one of the best in the state. Their manufacturing facilities have had six MIOSHA inspections without a violation, citation or fine. Several locations have received Ergonomic Success Awards and Ergonomic Innovative Awards from MIOSHA.

The safety program has benefitted the company in the area of worker's compensation. Their worker's compensation cost is 1/10 of other companies their size and for the last 6 years has run at less than $2.25 per $100 of pay roll.

Blue Water Plastics supports its employees through progressive and proactive policies and programs, including an extensive employee training program. In addition, their comprehensive wellness program funds wellness activities and provides time off for participation. Recently, they were chosen as a recipient of the 2000 Gold Award from the Governor's Council on Physical Fitness, Health and Sports.

Larry Eisenga, Vice President of Human Resources, is instrumental in the company's safety activities. "Employee safety and health is everyone's responsibility. This involvement minimizes the chances of accidents, which in turn results in a safe workplace," said Eisenga.

Blue Water Plastics' goal is to provide a safe and healthy environment for every employee. According to Koury, "None of this would be possible without the commitment and support from **President Carl Haas**, to the managers of each of Blue Water Plastics' 11 locations. Safety is everyone's responsibility."

Carrie Barrette, Tim Koury and Larry Eisenga with Blue Water Plastics.

This column features successful Michigan companies that have established a comprehensive safety and health program which positively impacts their bottom line. An accident-free work environment is not achieved by good luck—but by good planning! Creating a safe and healthy workplace takes as much attention as any aspect of running a business. Some positive benefits include: less injuries and illnesses, lower workers' compensation costs, increased production, increased employee morale, and lower absenteeism.

STANDARD UPDATE
Powered Industrial Truck

By: Gerald Medler
CET Consultant

Accidents, injuries and fatalities due to inadequate maintenance and/or lack of comprehensive operator training in the use of powered industrial trucks has been, and continues to be, a major concern in Michigan, as well as in the rest of the nation. According to OSHA, an estimated 100 fatalities and 95,000 injuries annually are caused by the unsafe operation of powered industrial trucks.

Federal OSHA's reaction to this situation resulted in amendments to their Powered Industrial Truck Standard requiring operator training, evaluation and certification, which became effective in December 1999.

Michigan has had training and permit requirements since 1971 in the Part 21, Powered Industrial Truck Safety Standard. Some of the new federal OSHA requirements were not contained in Part 21, however, they were addressed by other MIOSHA standards.

In order to make it easier for employers to identify these existing requirements, Michigan's Part 21, Powered Industrial Truck Safety Standard was amended and took effect April 28, 2000. Current rules require that employers ensure that only trained and authorized operators shall be permitted to operate a powered industrial truck. This article summarizes the revisions to Part 21.

The standard states that "an individual who is authorized by the employer and who has the knowledge, training, and experience to train and evaluate the competence of the operator shall provide the training and evaluation."

Training shall consist of a combination of both classroom and hands-on training. The formal instruction can include lecture, discussion, interactive computer learning, videotape, and written material. The hands-on or practical training should include demonstrations performed by the trainer and practical exercises performed by the trainee. Following the training, the operator's performance in the workplace will be tested and evaluated, and a operator's permit will be issued.

An employee being trained is exempt from the permit requirement for a period of not more than 30 days, provided the employee is under the supervision of an individual who meets the qualifications listed above. The permit is to be carried by the operator, or be available upon request at all times during working hours.

Powered industrial truck operators are to be re-evaluated and receive refresher training at least every three years. Refresher training should also help to ensure that the employee has maintained the ability and knowledge to operate the truck in a safe manner. Refresher training in relevant topics shall also be provided to an operator when:

- They have been observed operating the vehicle in an unsafe manner.
- They have been involved in an accident or a near-miss incident.
- They have received an evaluation that reveals they are not operating the truck safely.
- They are assigned a different type of truck, or the truck has been modified.
- Conditions change in the workplace that could affect safe operation of the truck.

The vehicles listed below were included in the original Part 21 standard. Appendix A of Part 21 provides pictures with the list of vehicles:

- Fork lift trucks or high lift trucks,
- Industrial tractors,
- Platform lift trucks,
- Motorized hand trucks, and
- Other specialized trucks.

The following vehicles were added to the definitions contained in Part 21:

- High-lift Platform Truck: a self-loading truck equipped with a load platform, intended primarily for transporting and tiering loaded skid platforms.
- Industrial Crane Truck: a truck intended primarily for pick and carry use in warehousing, yarding, or industrial plant operation over improved or hard-surfaced roads and yards, including maintenance within these areas.
- Rough Terrain Forklift Truck: a wheeled-type truck which is designed primarily as a fork truck that has a vertical mas or pivoted boom, or both, which has variable fixed length reach and which may be equipped with attachments and is intended for operation on unimproved natural terrain, as well as the disturbed terrain of construction sites.

Rough terrain fork lift truck.

The vehicles listed below are not considered powered industrial trucks:

- Vehicles intended primarily for earth moving or over-the-road hauling,
- Industrial trucks that operate on compressed gas, and
- Farm tractors.

A significant addition added to Part 21 is the adoption of updated National Consensus Standards. Trucks manufactured after Jan. 15, 1971, but before 1993, shall be in compliance with ANSI B56.1-1969. Those trucks manufactured after that date shall be in compliance with ANSI B1-1993, or as specified below:

ANSI B56.1-1993 "Safety Standard for Low Lift and High Lift Trucks."

ANSI B56.6-1992 "Rough Terrain for Lift Trucks."

ANSI B56.7-1987 "Safety Standard for Industrial Crane Trucks."

Cont. on Page 17

MIOSHA New Initiatives Outreach Team

The MIOSHA strategic plan **New Initiatives Outreach Team** seeks to inform employers and employees about new and revised standards. The first project of the team focuses on the recent amendments to the General Industry Part 21, Powered Industrial Truck Safety Standard.

Although MIOSHA **does not** certify trainers, the outreach committee has scheduled a series of Powered Industrial Truck "Train the Trainer" seminars. The objectives of the seminars are: to assess participant's knowledge of the Part 21 standard, to describe the elements of a powered industrial truck safety training program, and to inform participants of the recent amendments to the standard.

For full information on the seminars, see the Education and Training Calendar on page 13.

Powered Industrial Truck Train the Trainer Seminars

Date	Location
9/12	Clarkston
9/12	Sault Ste. Marie
9/21	Roseville
9/26	Cadillac
10/3	Livonia
10/11	Lansing
10/19	Howell
11/14	Grand Rapids
12/5	Kalamazoo

Safety Strategies for...

Nursing Homes and Long-term Care Facilities

By: Suellen Cook
CET Consultant

If you had to choose the most dangerous job in America, you might select a coal miner, steel worker, cab driver or construction worker. Surprisingly enough, the job most likely to injure a worker is nursing home caregiver! Caregivers in nursing homes continue to suffer an epidemic of disabling workplace injuries and illnesses. As our population ages, this industry continues to grow and expand.

In response to this epidemic, in 1999 MIOSHA announced a special emphasis program for long-term care facilities, as part of our strategic plan. During 1999, MIOSHA developed a five-year strategic plan through a team of managers with a substantial amount of stakeholder input. This plan was designed to help MIOSHA effectively focus its resources on key areas.

Using 19 teams , MIOSHA developed strategies and implementation plans for each of 23 performance goals. These teams have members from all program areas affected by the performance goals. The performance goals relate directly to the plan's three strategic goals and begin with specific baselines to be compared to in future years.

High-Hazard Industries

One of the 23 performance goals targets nursing homes and personal care facilities. Specifically, the stated goal is to reduce injuries and illnesses in nursing homes and personal care facilities by 15 percent. The Standard Industrial Classification (SIC) codes affected by the strategic plan objective are 8050-8059.

Nursing homes and long-term care facilities will be targeted for an increased number of inspections beginning in the fiscal year 2000-2001. Nursing homes are not the only industry being targeted for inspections by MIOSHA. Five other high-hazard industries are also being targeted for increased numbers of inspections and those include: Metal forgings and stampings–SIC 344; Fabricated structural metal products–SIC 346; Meat products–SIC 201; Construction–SIC 15, 16, and 17; and Educational services–SIC 82.

Why has MIOSHA selected these industries for increased scrutiny? The targeted industries listed, including long-term care facilities, are considered high-hazard industries due to the number of MIOSHA recordable injuries and illnesses reported that result in lost time days and restricted days compared to other non-targeted industries in the state.

Caregiver Injuries

Back injuries, among the most serious and expensive of workplace injuries, are the most common injuries suffered by nursing home workers. Nurses' aides, who provide most of the care in long-term facilities, suffer the greatest exposure and thus the greatest risk for injury. More than 18 percent of all nursing home workers will be injured or become ill on the job each year, and these injuries are not minor. Of those injured, more than 25 percent will need more than two weeks to recover from their injury.

Back injuries, while severe, are not the only exposure risk for nursing home workers. Caregivers in nursing homes are exposed to a wide variety of hazards. Exposures can be classified into six different categories: biological/infectious, chemical, environmental/mechanical, ergonomic, physical, and psychosocial. Given these statistics it's obvious there is a need for a wide range of safety and health training for long-term care facility employees. Keeping these workers safe and healthy is not only mandated by the MIOSHA Act of 1974, but is vital to the future of this nation and for the sake of some of our most vulnerable citizens–the infirm and the elderly.

Education and Training Opportunities

Before MIOSHA begins the enforcement/inspection component of the strategic planning process, education and outreach will be offered by the **CET Division** to employers and employees in these targeted industries. CET offers free, comprehensive services to help employers identify and eliminate safety and health hazards. For example, CET consultants can conduct on-site hazard surveys (no citations or monetary penalties issued), review written safety and health programs, and assist with in-service training of supervisory staff. These services are provided to Michigan employers at no cost. Some of the safety and health training programs offered include how to identify and prevent injuries caused by lifting and repetitive tasks, eliminate hazards that cause slips and falls in the workplace, and protect workers from bloodborne pathogens, tuberculosis, and other infectious diseases.

Educational outreach to health care workers has already started in Michigan. **SET Grant** recipient, **Michigan Health & Hospital Association (MHHA)** offered a series of seminars titled **"On the Backs of Direct Care Workers"** in Ann Arbor, Midland and Grand Rapids in March and April. Under the SET Grant, MHHA is providing in-house hazard recognition and training for employees to prevent repetitive motion injuries and illnesses. The CET Division will continue to partner with organizations, such as MHHA, to promote the MIOSHA strategic plan to all affected Michigan employers and employees.

Additional CET seminars addressing the hazards associated with nursing homes and personal care facilities will be conducted statewide.

Transferring a frail nursing home patient. (Photo courtesy of MHHA)

The first in a series of seminars titled "**Safety Solutions for Nursing Homes and Long-Term Care Facilities**" will be held on Oct. 17, at Schoolcraft College in Livonia. This MIOSHA program involves a full day of training to address specific occupational health and safety hazards that may be causing workplace accidents and injuries in nursing homes and long-term care facilities. Topics to be covered include hazard recognition in the long-term care facility, and health-related regulatory issues affecting nursing homes such as tuberculosis, bloodborne infectious diseases, and respiratory protection. Back injury and musculoskeletal injury prevention assessment tools will be evaluated and potential solutions for caregivers introduced. Venders of patient lift assist equipment will have examples of devices on site for the demonstration of successful and safe patient transfers.

For more information on training opportunities or to schedule a site visit with a CET consultant, contact the **MIOSHA CET Division at 517.322.1809**. ■

CET Seminars

The MIOSHA strategic plan Nursing Home and Personal Care Facilities Team has planned a series of seminars which address the occupational hazards associated with nursing homes and personal care facilities.

Date	Location
10/17/00	Livonia
1/17/01	Grand Rapids
3/14/01	Mt. Pleasant
5/16/01	Escanaba
8/15/01	Lansing

For details on the Livonia seminar, check the Training & Education Calendar on page 13. Details on the 2001 seminars will be in future issues.

70th Annual Michigan Safety Conference

The MIOSHA booth at the exhibitor's hall.

If you're in the field of occupational safety and health in Michigan, you were probably one of the more than 4,000 attendees at the 70th Annual Michigan Safety Conference. The conference is Michigan's premier safety and health event, and was held April 11 & 12, 2000, in Lansing. Billed as a "One Stop Shopping" conference for all safety and health needs–attendees selected from more than 120 training sessions and visited an extensive exhibition area with more than 240 exhibitors.

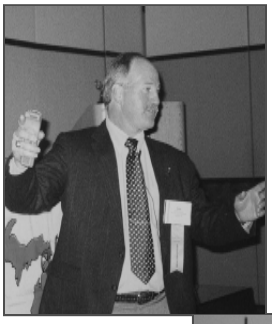
The conference goal is to help participants improve worker safety and health, reduce workers' compensation costs, and increase the productivity and profitability of business and industry.

The Michigan Safety Conference is a volunteer association of business, industry and government leaders from across the state. The conference provides a unique opportunity to share information and ideas on current occupational safety and health issues. It boasts members from some of the most safety-conscious companies in Michigan, large and small, who are devoted to promoting safety and health in the workplace.

The conference features such diverse approaches to safety as: hands-on training, panels of experts, dialogues and discussions, audio-visual presentations, poster sessions, live demonstrations, and updates on the latest safety and health issues by recognized leaders in the field. Participants leave the conference with practical, useful printed materials to assist them in their workplace.

Hundreds of volunteers contributed considerable time and effort to stage this year's event. The Board of Directors is grateful to the countless companies across the state who allowed their employees to work on the conference. MIOSHA is a strong supporter of the conference, with nearly 100 safety and health professionals and support staff involved in planning and implementation.

MIOSHA encourages anyone associated with safety and health in Michigan to become a part of the largest state safety and health conference in the nation. It will provide a valuable opportunity to network and exchange ideas and information with safety and health professionals from across the state. For information on the conference call: 517.630.8340.



Lee Jay Kueppers, CET Consultant, covered the Top 25 MIOSHA GI Violations.

Suellen Cook, CET Consultant, discussed lockout/tagout compliance.

John Peck, OHD Chief, gave an Occupational Health Division overview.

Safety Professional of the Year

Sheila A. Finch, CHSP, CHMM
NW Region Safety Officer/Mngr.
Environment of Care
Sinai-Grace Hospital (DMD)

Sheila Finch has 27 year of healthcare experience and 10 years of hospital safety program development and management. She serves as Safety Officer for the Northwest Region that consists of two nursing care centers, two professional buildings, a 400-bed hospital and 100 ambulatory centers. She has served on the Detroit Metropolitan Medical Response System Planning Committee and organized 14 Detroit hospitals to address emergency preparedness and community response. Her three-day "Train the Trainer" course on hospital decontamination continues to be conducted for Michigan hospitals. Finch has extensive experience in program development and presentation for a wide variety of training programs in the healthcare field.

Sheila Finch (L) and Gerry Felty (R) receive their awards from S. William Haynes, Jr. (C) President of the 70th Annual Michigan Safety Conference.

Distinguished Service Award

Garry R. Felty, CSP, CHSM
Task Based Risk Assessment
Facilitator/Safety & Health Trainer
UAW Local 730, General Motors
Metal Stamping

Garry Felty joined the Michigan Safety Conference (MSC) as a member of the Industrial Division in 1982, and assumed the chairmanship in 1984. He was elected to the Board of Directors in 1985, and currently serves as a member of the Board Council. Felty served as chairperson of the Awards Committee for two years and co-chaired the Safety Management Section for three years. He was elected Executive Secretary in 1991, and served as President in 1997. Currently he is chairperson of the CEU committee. He has devoted hundreds of hours of his time to the MSC.

Safety Council for Southwest Michigan

About 100 Michigan companies were honored for their workplace safety and health efforts Wed., April 19, 2000, at the **53rd Annual Safety Awards Banquet** at the Fetzer Center, Western Michigan University.

The annual awards banquet is sponsored by the **Safety Council for West Michigan** and is the only effort in West Michigan to recognize business and industry for providing a safe and healthy workplace for their employees. More than 200 employers and employees attended the awards presentation.

Approximately 7,000 businesses and industries were invited to participate in the awards by providing their accident rates for 1998 and 1999, as recorded in the MIOSHA 200 Log. Companies compete for the awards with other businesses and industries similar in size, and also with themselves by submitting their rates from the previous year.

The grouping categories are based on a company's manhours: Group 1 - One million plus; Group 2 - 500,000 to 999,999; Group 3 - 250,000 to 499,999; Group 4 - 100,000 to 249,999; Group 5 -50,000 to 99,999; Group 6 - 0 to 49,999.

Wise Personnel of Kalamazoo received the award, Greatest Reduction in Accidents 1999, in Group 1.

The awards were presented by **Mary Gustas, Executive Director**, and **Deborah Klerk, Board President**, Safety Council for West Michigan. The following awards were presented for each of the six categories: **Lowest Accident Rate 1999**; **No Incident Rate 1999** (Group 5 only); **No Lost Time Accidents 1999**; and **Reduced Accident Incidence Rate 1999.**

The award, **Greatest Reduction in Accidents 1999**, was presented to one company in each of the six categories. The award is based on the reduction of accidents from 1998 to 1999. The six companies are: Group 1 - **Wise Personnel**, Kalamazoo; Group 2 - **Hayes Lemmerz International, Homer Division**, Homer; Group 3 - **Peregrine Metalforming Inc., Battle Creek Operations**, Battle Creek; Group 4 - **Trojan Heat Treat Inc.**, Homer; Group 5 - **Holland Wire Products Inc.**, Holland; and Group 6 - **Agri Sales Inc.**, Battle Creek.

The Safety Council for West Michigan has more than 400 member companies, and can be reached at: 616.344.6189.

Michigan State AFL-CIO

April 27 - 28, 2000, the Michigan State AFL-CIO held its biannual Safety and Health Conference. The conference attracted nearly 500 attendees and culminated with a tribute to Workers' Memorial Day. **Richard Whitwam**, Director, Occupational Safety & Health, for the Michigan State AFL-CIO coordinates the conference and said he is proud of the proactive role the union plays in assuring workplace safety and health.

Attendees were welcomed by **Tina Abbott**, Secretary-Treasurer, Michigan State AFL-CIO. **Mike Connors**, OSHA Administrator, Region V, gave an update on federal OSHA's initiatives, including the proposed ergonomics standard. **Doug Earle**, MIOSHA Director, gave an overview of MIOSHA activities and hosted a presentation by MIOSHA Deputy Directors and Division Chiefs.

The topics covered in the conference included: construction safety, violence in the workplace, lockout/tagout and machine guarding, health hazards for healthcare workers, asbestos, confined space, workers' compensation, ergonomics, chemical and toxic hazards, hepatitis C, and standards requiring written training programs.

Presenters included representatives from: MIOSHA, Michigan State University, AFSCME International Union, SEMCOSH, Michigan Hepatitis "C" Foundation, Kalamazoo County, Michigan State Fire Fighters Local 421, the UAW, and the Michigan State AFL-CIO.

Michigan State AFL-CIO is one of MIOSHA's SET Grantees. Their grant provides statewide safety and health training to students engaged in school-to-work (STW) based learning. The training provides youth entering the workforce with the ability to identify workplace safety and health hazards, so accidents and injuries can be avoided

During the conference on April 28th, a **Workers' Memorial Day** tribute was held. This date marks the signing of the federal OSHA Act, and is the day unions remember and pay tribute to those who lost their lives on the job. It is also a day when members come together to rededicate themselves to promote practices that ensure safe and healthy work conditions on the job for all working men and women.

The keynote speaker for Workers' Memorial Day this year was **Michigan Attorney General Jennifer Granholm**. The Attorney General urged all attendees to rededicate themselves to worker safety.

Tina Abbott, Mike Connors, Richard Whitham, and Doug Earle.

Wage & Hour News

Youth Employment

Governor Engler Declares June Youth Employment Month

Governor John Engler issued an Executive Declaration in observance of Youth Employment Month in June to educate employers about legal and safe working environments for the state's 466,000 working teens.

The Michigan Department of Consumer & Industry Services (CIS) is kicking off the month-long educational campaign by educating employers about child labor laws. The CIS Bureau of Safety & Regulation's Wage & Hour Division is teaming up with the U.S. Department of Labor Wage & Hour Division to visit employers to pass out fliers and discuss legal aspects of employing minors in Michigan.

The educational campaign will target retail and fast food establishments where the majority of teenagers are employed. Visits are planned for Detroit, Grand Rapids, Lansing, Marquette, Kalamazoo, Traverse City, Saginaw, Mt. Clemens, Ann Arbor, Northville, Rockford, Sterling Heights, Brighton, Auburn Heights, Okemos, Grandville, Livonia, Holland, Roseville and Farmington.

"Michigan employers are encouraged to recognize that hiring youth, even if it is just for the summer, is an investment in the future of this state," Governor John Engler said. "These early work experiences help reinforce the work skills and attitudes taught in our homes and schools and will have a major impact on our work force of the future."

CIS Director Kathy Wilbur said minors are required to have a work permit, which can be obtained in any Michigan school district. Generally, youths must be a minimum of 14 years old for most jobs, however kids as young as 11 can work as a golf caddie, sports referee or as a farm worker.

Wilbur said, "Michigan's child labor laws were created to ensure the safety and well-being of the state's youngest workers. This summer it is particularly important to ensure that employers are educated about these laws since they are more likely to hire teens to help fill the labor shortage caused by the state's low unemployment and surging economy."

Minors aged 14 and 15 can work up to 40 hours per week from 7:00 a.m. until 9:00 p.m. while 16- and 17-year-olds can be employed between the hours of 6:00 a.m. until 11:30 p.m. for up to 48 hours per week.

Michigan child labor law requires that minors not be allowed to work more than five hours without a 30-minute break period. Adequate adult supervision is also required for working minors. If you have questions about the Youth Employment Standards Act, contact the Wage & Hour Division.

Investigation Training

On May 24th and 25th Wage & Hour investigators attended an intensive two-day training session. The main emphasis of the training was investigation techniques for prevailing wage claims.

The training included an overview of the law and policies, as well as practical hands-on exercises. The objective of the training was to continue to improve the quality and consistency in which these cases are handled.

There was also a presentation by the U. S. Department of Labor (USDOL) Wage and Hour Division, which included an overview of their program and a discussion of ways that we can improve communication and the working relationship with USDOL. During the month of June, federal and state investigators teamed up to provide education and training on youth employment standards to businesses throughout Michigan.

A representative from the Attorney General's office also presented an overview of their functions with regard to wage and hour activity. There was a question and answer session and methods to improve investigations and documentation were discussed to increase the likelihood of successful collection of wages or resolution of claims.

The meeting was a success and part of the division's continuing efforts to review and improve the services that we provide to employees and employers in the state.

Youth Employment Seminars - Employer Comments

Below are comments received from employers following the youth employment educational seminars provided by the Wage & Hour Division.

"It's nice to have someone come out and provide the information and explain a little bit about it without going through any records."

"We always try to follow the law, but sometimes we just don't know what is required or where to get the correct answers...it's nice to have someone come and provide materials and answers."

"I would strongly recommend that both the state and the U.S. Department of Labor continue to make these types of educational contact."

For More Information

Wage & Hour Division

517.322.1825

Website:

www.cis.state.mi.us/bsr/divisions/wh/home.htm

Education & Training Calendar

Date	Course Location	MIOSHA Trainer Contact	Phone
July			
27	When MIOSHA Visits Washington	Lee Jay Kueppers Reid Sheeley	810.752.2091
August			
1, 2, 3	Safety Administrator Course Port Huron	Bernard Sznaider Kathy Young	810.985.1828
21, 22, 23	Safety Administrator Course Muskegon	David Nelson Lisa Sabourin	231.759.0916
September			
12, 13, 14	Safety Administrator Course Dearborn	Linda Long Nancy Koehler	313.982.6131
19	Ergonomics & Your Safety & Health Program Clinton Twp.	Suellen Cook Sharon Macri	810.263.2882
22	MIOSHA Top 25 Safety Violations Workshop Clinton Township	Suellen Cook Sharon Macri	810.263.2882
October			
5, 12, 19	Safety Administrator Course Belleville	Suellen Cook Janet Millard	734.697.7151
11	When MIOSHA Visits Saginaw	Richard Zdeb Joe	517.790.4475
17	Safety Solutions/Nursing Homes &Long-Term Care Facilities Livonia	Suellen Cook Diane Burns	734.462.4448
November			
9	Building An Effective Safety Program Saginaw	Richard Zdeb Joe	517.790.4475
17	How To Survive A MIOSHA Inspection Clinton Township	Suellen Cook Staff Person	810.263.2410

Special Seminars - Powered Industrial Truck - Train the Trainer

September			
12	Powered Industrial Truck Clarkston	Richard Zdeb Peggy DeRosier	248.620.2534
12	Powered Industrial Truck Sault Ste. Marie	Gerald Medler Sherri Paulowski	906.635.2802
21	Powered Industrial Truck Roseville	Bernard Sznaider Staff Person	810.445.5480
26	Powered Industrial Truck Cadillac	Gerald Medler Cindy Swiler	616.775.2458
October			
3	Powered Industrial Truck Livonia	Suellen Cook Diane Burns	734.462.4448
11	Powered Industrial Truck Lansing	Debra Gundry Sandy Long	517.394.4614
19	Powered Industrial Truck Howell	Karen Odell Janie Willsmore	517.546.3920
November			
14	Powered Industrial Truck Grand Rapids	Micshall Patrick Dannielle Wheeler	800.704.7676
December			
5	Powered Industrial Truck Kalamazoo	Micshall Patrick Lisa Peet	616.373.7807

Construction Safety Standards Commission

Labor

Mr. Daniel Corbat
Mr. Carl Davis**
Mr. Andrew Lang
Mr. Martin Ross

Management

Mr. Thomas Hansen
Mr. Charles Gatecliff
Ms. Cheryl Hughes
Mr. Peter Strazdas*

Public Member

Mr. Kris Mattila

General Industry Safety Standards Commission

Labor

Mr. James Baker
Mr. Tycho Fredericks
Mr. Michael D. Koehs*
Mr. John Pettinga

Management

Mr. George A. Reamer
Mr. Timothy J. Koury**
Ms. Doris Morgan

Public Member

Ms. Geri Johnson

Occupational Health Standards Commission

Labor

Dr. G. Robert DeYoung**
Ms. Cynthia Holland
Capt. Michael McCabe
Ms. Margaret Vissman

Management

Mr. Robert DeBruyn
Mr. Michael Lucas
Mr. Richard Olson
Mr. Douglas Williams*

Public Member

Dr. Glen Chambers

**Chair **Vice Chair*

Standards Update

Standards Division Receives Clarity Award

The Standards Division recently received recognition in the **Michigan Bar Journal** (May 2000) as one of the first recipients of the Clarity Awards in the new century. The clarity awards are given in 20 categories to legal documents that are written in plain English, without legalese. The purpose of the awards are: to promote the use of clear writing by legal professionals, to increase public understanding of and respect for the judicial system, and to contribute to the openess of the legal profession.

Rule R408.41006a, Employer Responsibilities for Lifting and Digging Equipment, Construction Safety Standard Part 10, was written by **Connie Munschy**, Chief of the Standards Division, Bureau of Safety and Regulation, and was cited as an excellent example of the clear style in which administrative rules are written.

The Bureau utilizes advisory committees for input into the standards writing process. The following people were involved in the process: the Part 10 Advisory Committee (see list below), as well as **Rick Mee**, Chief of the Construction Safety Division, and Construction Safety Officer **Jim Pike**.

The cooperation between the Construction Safety Division, the Part 10 Advisory Committee, and the Standards Division has resulted in the clarity for which this rule has been recognized. Recognition is also given to Standards staff secretaries **Dena Hendon** and **Christine Hundt** for their excellent preparation of the materials.

Connie Munschy, Chief, Standards Division.

CS Part 10. Lifting & Digging
Advisory Committee Members

Labor

Daniel Boone
IUOE Local 324
Ken Peterie
IUOE Local 324
Joe Wrzesinski
Retired Union Member
Gary Ganton
IUOE Local 324
Lorne Nichols
Retired Union Member

Management

John DiPonio
Merriman Construction Company
Frederick Rozelle
Consultant
Alan Livernois
Allingham Corporation
Rolf Lovgren
Crane Partner International

To contact Connie Munschy, Chief of the Standards Division, or any of the Commissioners, please call the Standards Division Office at 517.322.1845.

Status of Michigan Occupational Safety & Health Standards

Occupational Safety Standards

General Industry

Part 06.	Fire Exits	Final, effective 5/5/00
Part 18.	Overhead and Gantry Cranes	At Advisory Committee
Part 19.	Crawler, Locomotives, Truck Cranes	Approved by Commission for review
Part 20.	Underhung and Monorail Cranes	Approved by Commission for review
Part 21.	Powered Industrial Trucks	Final, effective 4/26/00
Part 56.	Storage and Handling of Liquefied Petroleum Gases	Draft at LSB for formal review
Part 58.	Vehicle Mounted Elevated & Rotating Platforms	Approved by Commission for review
Part 69.	Compressed Gases	RFR approved
Part 74.	Fire Fighting/Amendment #2	At Advisory Committee
Part 78.	Storage & Handling of Anhydrous Ammonia	LSB formal certification
Part 79.	Diving Operations	At Advisory Committee
Part 93.	Air-Receivers	Draft at LSB for informal review

Construction

Part 07.	Welding & Cutting	Approved by Commission for review
Part 10.	Lifting & Digging	Draft at LSB for informal review
Part 18.	Fire Protection & Prevention	At Advisory Committee
Part 22.	Signs, Signals, Tags & Barricades	At Advisory Committee
Part 26.	Steel and Precast Erection	At Advisory Committee
Part 30.	Telecommunications	Approved by Commission for review
Part 31.	Diving Operations	At Advisory Committee
Part 32.	Aerial Work Platforms	Final, effective 4/26/00

Occupational Health Standards

General Industry

Air Contaminants	RFR approved
Asbestos for General Indusstry	Draft at LSB for informal review
Lead	Draft at LSB for informal review
Methylenedianiline	RFR approved
Personal Protective Equipment	Draft at LSB for informal review
Powered Industrial Trucks R3225	Draft at LSB for informal review
Respirators in Dangerous Atmospheres	Draft at LSB for informal review
Vinyl Chloride	Final, effective 4/26/00

Construction

Noise in Construction R6260	Draft at LSB for informal review
Personal Protective Equipment for Construction R6260	Draft at LSB for informal review

Administrative Rules

Part 11.	Recording of Occupational Illnesses and Injuries	LSB formal certification
Part 12.	Variances	LSB formal certification

The MIOSHA Standards Division assists in the promulgation of Michigan occupational safety and health standards. To receive a copy of the MIOSHA Standards Index (updated May 2000) or for single copies and sets of safety and health standards, please contact the Standards Division at 517.322.1845.

Request for Rulemaking
ORR Office of Regulatory Reform
LSB Legislative Services Bureau
JCAR Joint Committee on Administrative Rules

Variances

Published July 14, 2000

Following are requests for variances and variances granted from occupational safety standards in accordance with rules of the Department of Consumer & Industry Services, Part 12, Variances (R408.22201 to 408.22251).

Variances Requested Construction

Part number and rule number from which variance is requested
Part 8 -Material Handling: Rule R408.40833, Rule 833(1)
Summary of employer's request for variance
To allow employer to tandem lift structural steel members under controlled conditions and with stipulations.
Name and address of employer
Broad, Vogt & Conant, Inc.
Location for which variance is requested
Chrysler Motors Mack, Detroit
Name and address of employer
Douglas Steel Erection Company
Location for which variance is requested
State of Michigan Hall of Justice, Lansing
William Beaumont Hospital, Royal Oak
General Motors Lansing Building 15, Lansing
Name and address of employer
Kvaerner Songer
Location for which variance is requested
Romulus Business Center, Romulus
Name and address of employer
McGuire Steel Erection, Inc.
Location for which variance is requested
2529 Boardwalk, Ann Arbor
Dodson Elementary School, Plymouth
Lincoln Middle School, Ypsilanti
Sears The Great Indoors - Phase II, Shelby Twp.
Lot #5 - Office Building, Ann Arbor
Auburn Hills Public Safety, Auburn Hills
Islamic Center of America, Dearborn
The Michigan Theater, Ann Arbor
Name and address of employer
Pioneer, Inc.
Location for which variance is requested
Spectrum Health, Grand Rapids
Name and address of employer
Richmond Steel Erectors, Inc.
Location for which variance is requested
G. M. Lansing Grand River Assembly Plant, Lansing
Name and address of employer
Sova Steel, Inc.
Location for which variance is requested
Sunrise Assisted Living, Troy
Duke Office Building, Farmington

Part number and rule number from which variance is requested
Part 10 - Lifting & Digging Equipment: Rule 4084.1015, Rule 1015a(2)(g)(h)(i) & 1018a(12)
Summary of employer's request for variance
To amend the previous variance request to allow the use of a work platform containing a stripping platform mounted on the boom of a P & H Omega 40 ton hydraulic crane to heights of up to 70 feet provided all of the requirements of CS Standard, Part 10 - Lifting & Digging Equipment except Rule 1015a(2)(g)(h)(i) and 1018a(12) are met.
Name and address of employer
Walter Toebe Construction Company
Location for which variance is requested
I-94/I-75 Interchange Project in Wayne County, MDOT Project #BHI82251-45188A

Part number and rule number from which variance is requested
Part 13 - Mobile Equipment: Ref. #1926.1000 (a) (1&2) (b)
Summary of employer's request for variance
To allow the employer to work under overhead conveyor obstructions in an assembly plant to dig shallow foundation pad excavations without the use of roolover equipment providing certain stipulations are adhered to.
Name and address of employer
Alberici - Walsh - PBM
Location for which variance is requested
Midfield Parking Structure, Detroit

Variances Granted Construction

Part number and rule number from which variance is requested
Part 8 -Material Handling: Rule R408.40833, Rule 833(1)
Summary of employer's request for variance
To allow employer to tandem lift structural steel members under controlled conditions and with stiupulations.
Name and address of employer
American Erectors, Inc.
Location for which variance is requested
U of M Hospital Emergency Room, Ann Arbor
44th District Court, Royal Oak
Name and address of employer
Assemblers, Inc.
Location for which variance is requested
Central Michigan University Park Library, Mt. Pleasant
Name and address of employer
Cadillac Iron, Inc.
Location for which variance is requested
Lawrence Technological University, Southfield
Dexter High School, Dexter
Name and address of employer
Douglas Steel Erection Company
Location for which variance is requested
735 East Michigan Ave., Lansing
Name and address of employer
McGuire Steel Erection, Inc.
Location for which variance is requested
Center for Creative Studies, Detroit
Christ The King Catholic Center, Ann Arbor
Lighthouse of Oakland Co., Pontiac
Name and address of employer
Pioneer, Inc.
Location for which variance is requested
East Paris Medical, Grand Rapids
Name and address of employer
Redinger Steel Erectors, Inc.
Location for which variance is requested
Jacobsons, Okemos
Name and address of employer
Sova Steel, Inc.
Location for which variance is requested
Wayne State University, School of Pharmacy, Detroit
Greater Grace Temple, Detroit

Part number and rule number from which variance is requested
Part 13-Mobile Equipment: R408.41301, Ref. #1926.1000(a)
Summary of employer's request for variance
To allow the use of a Case Model D310GE Dozer Serial #3040501 in the bottom level of the parking structure without the use of rollover equipment, providing certain stipulations are adhered to.
Name and address of employer
Aristeo Constructioin Company
Location for which variance is requested
Sterling Heights Assembly Plant, Sterling Heights

Part number and rule number from which variance is requested
Part 14 - Tunnels, Shafts, Caissons & Cofferdams: R408.41482, Rule 1482 (g)
Summary of employer's request for variance
To allow employees to remain in the caisson under controlled conditions when material is being hoisted from the caisson and according to certain stipulations.
Name and address of employer
Dan's Excavating, Inc.
Location for which variance is requested
77' diameter styormwater Pump Station, Romulus

Part number and rule number from which variance is requested
Part 32 - Aerial Lift Platforms: R408.43209, Rule 3209 (8) (b) & R408.43209, Rule 3209 (g)
Summary of employer's request for variance
To allow employer to firmly secure a scaffold plank to the top of the intermediate rail of the guardrail system of an aerial lift for limited use as a work platform provided certain stipulations are adhered to.
Name and address of employer
Applegate, Inc.
Location for which variance is requested
Northwest Midfield Terminal, Romulus

Variances Granted General Industry

Part number and rule number from which variance is requested
Part 1 - General Provisions: Rule 36(1)
Summary of employer's request for variance
Employer has been granted permission to use high pressure air guns under controlled conditions.
Name and address of employer
Douglas Steel Fabricating Corporation
Location for shich variance is requested
1312 Waverly Road, Lansing

Part number and rule number from which variance is requested
Part 63 -Pulp, Paper, and Paperboard Mills: Rule 6384(2)
Summary of employer's request for variance
Employer has been granted permission to provide additional guarding on and control access to the blade of a roll splitter, rather than leave it in the down position when not in use.
Name and address of employer
Crown Vantage Paper Company
Location for which variance is requested
1000 N. Huron St., Ypsilanti

Part number and rule number from which variance is requested
Part 63 -Pulp, Paper, and Paperboard Mills: Rule 6384(1)
Summary of employer's request for variance
Firm has been granted permission to use 2 hand constant pressure controls in lieu of required interlocked barrier on a roll splitter machine.
Name and address of employer
Crown Vantage Paper Company
Location for which variance is requested
1000 N. Huron St., Ypsilanti ■

Fireworks Safety

Cont. from Page 1

injured several people. That explosion was a wake-up call to the city to closely examine their procedures. They totally revamped their program, which now includes: following all NFPA (National Fire Protection Association) Guidelines; expanding the perimeter, providing for greater public safety; hiring a professional organization for the actual display; using volunteers, particularly veterans, for securing the perimeter; and having adequate police and fire protection on hand.

Bay City responded enthusiastically to MIOSHA's request to co-sponsor the seminar. They are very willing to share their experiences, in the hopes that other cities won't suffer the injuries their community did. "This is a great partnership. Bay City saw first-hand what could go wrong, dramatically improved their program, and are eager to share what they've learned," said Kueppers.

MIOSHA worked with several state and federal offices that regulate the manufacture, storage, transportation, and display of fireworks to present an all-inclusive program for attendees. In most Michigan communities, local officials have given the fire department the authority to conduct fireworks displays. More than 90 representatives from fire departments across the state attended the seminars.

Jim Chapman, Bay City Firefighters Local 1435; Michael Halstead, Bay City Fire Marshal; Deborah Grether, BSR Deputy Director; and Douglas Doefer, Bay City Fire Chief.

One major concern for most communities is the need to safely secure the display area. During the day-long program participants traveled to the Bay City fireworks location at Veteran's Memorial Park to learn how to secure a perimeter in order to protect the viewing public.

Bay City Fire Marshal Michael Halstead conducted a tour of their fireworks launch site along the Saginaw River. Halstead told the group that one of their top priorities is to maintain security at the launch site, and that choosing a site with some existing natural or man-made boundaries will enhance their ability to keep people out of danger.

The following workshops were offered:

- **David Luptowski**, Occupational Safety Consultant, MIOSHA CET Division. Welcome and an overview of general MIOSHA program requirements.
- **Lee Jay Kueppers**, Occupational Safety Consultant, MIOSHA CET Division. How MIOSHA standards apply to fireworks and fireworks displays.
- **Michael Halstead**, Bay City Fire Marshal. The role of the Bay City Fire Department for the Bay City fireworks displays.
- **D/Lt. Larry Lewis**, Grand Rapids Office, Michigan State Police Fire Marshal Division. The responsibilities of local government units and the fireworks display professionals they hire.
- **Sgt. Dave Ford**, Commander, Hazardous Materials Unit, Michigan State Police Motor Carrier Division. Regulations covering the transport of hazardous materials.
- **Jacqueline Darrah**, Director of Industry Operations, Detroit Field Division, Bureau of Alcohol, Tobacco & Firearms (ATF) and **Debra Satkowiak**, Special Operations Inspector, ATF Flint. An overview of ATF regulations on fireworks storage and licensing.

All participants received a new pocket guidebook, "**Celebrate Safely**," produced by the American Pyrotechnics Association. Based on NFPA Rule 1123, the 20-page guidebook is a valuable reference tool for information on fireworks display requirements, setup, and inspection. The American Pyrotechnics Association, based in Bethesda, Maryland, is the premier trade association of the fireworks industry. For further information on the association, their website address is: www.americanpyro.com.

Public response to this seminar was outstanding. CET hopes to offer a similar program to municipalities next year. For further information, contact the MIOSHA CET Division at 517.322.1809.

Remember–Fireworks are beautiful–but they are still explosions! ■

Powered Industrial Trucks

Cont. from Page 8

ANSI B56.9-1992 "Operator Controlled Industrial Tow Tractors."

ANSI B56.10-1992 "Manually Propelled High Lift Industrial Trucks."

The training requirements not specifically addressed in Part 21, but required in other MIOSHA standards, were referenced in the amendment, to clarify the training responsibilities. Training associated with the hazards of exhaust gases and electrolyte chemicals used for battery operated trucks shall be provided in accordance with the Michigan Right-to-Know Hazard Communication Standard, Occupational Health Air Contaminants Rule, and Part 33, Personal Protective Equipment Standard.

Several other changes were also made. When being boarded by a powered industrial truck, a highway truck and trailer shall have their brakes set, and not less than two wheels blocked or restrained by other mechanical means installed in a manner that will hold the trailer from movement. (Note: the reference to "rear wheels" was eliminated.)

Provisions shall be made to isolate rail cars during switching operations as required by GI Part 1, General Provisions, R 408.10026. Where rolling railroad cars on a spur track could make contact with a rail car being loaded or unloaded, repaired or serviced, or entering a building, work or traffic area–derailers, bumper blocks, a blue flag or blue light, or other equivalent protection shall be used.

Where there is potential for employee exposure to injurious corrosive electrolyte solutions (e.g. sulfuric acid) associated with battery-powered industrial trucks, the employer shall provide: personal protective equipment in accordance with OH Part 433 and GI Part 33. The employer must also provide: suitable facilities for quick drenching or flushing of eyes and body within the work area for immediate emergency use in accordance with OH Part 440.

New training certification/operator permits and a revised operator manual with additional guidelines for operators of Rough Terrain Forklift Trucks are available from the CET Library. Copies of the Amended Part 21, Powered Industrial Truck Safety Standard are available from the MIOSHA Standards Division at 517.322.1845.

It should be noted that the new operator permit/training certification card not only contains listings of equipment covered by Part 21, but also equipment covered by Construction Safety Standards: Part 12, Part 13, and Part 32, and will meet training certification and permit requirements for all these standards.

A new addition to Part 21 is Appendix B, Fork Truck Pre-operation Inspection Checklist.

Employers are encouraged to review and enhance their current training programs for powered industrial truck operators. A higher level of training helps employees recognize a hazardous situation before it becomes an incident. ■

Crisis Intervention

Cont. from Page 5

crash site. The officers with field experience seemed to have fewer traumatic reactions, compared to officers who worked primarily at desk jobs.

Other factors which affect traumatic intensity include the duration of the event, the amount of terror and horror at the scene, the amount of traumatic stimuli, the predictability of the event, and the level of loss. For the citizens of Oklahoma City, one moment the city was normal–the next moment their familiar domain was a site few could imagine. The explosion was exceptionally traumatic because it took days to perform the search and rescue operations; numerous lives were lost; the degree of carnage was extensive; and the magnitude of the event affected not only Oklahoma City and the state of Oklahoma, but the entire nation as well.

Post-Traumatic Stress Reactions

After traumatic events, some individuals have difficulty overcoming the effects of the trauma. They become fixated on the event and cannot get it out of their minds. They may have flashbacks, intrusive memories, anxieties, or painful memories. Some have a fear of a repetition of the incident, or wonder if they will be placed under scrutiny.

If a range of symptoms persists for an extended period, a small percentage of those affected may develop post-traumatic stress disorder–a condition of emotional pain for the individual and a possible worker's compensation cost for the organization. Some cope by the use of drugs or alcohol to self-medicate the reactions they're experiencing. A few workers, who can afford to, quit their jobs to avoid being reminded of the event. While others, display physical symptoms resulting in misdirected medical care.

To reduce such uncomfortable reactions in employees, as well as the legal, financial and retraining liabilities, many employers have established critical incident response programs. Specially trained critical incident response teams are deployed almost immediately when notified of a critical event. The team's presence is seen as an expression of loyalty to employees, and provides a means to assess the severity and magnitude of the event, to establish control of the scene, and to offer immediate crisis assistance to reduce trauma.

Goals of Crisis Intervention

General MacArthur once said, "The second-best decision, quickly made, is better than the best decision, never made." In terms of responding to crisis situations, taking control of the scene begins the healing process. Because critical events are unexpected and may take away a person's sense of control–any activities which restore a sense of control will facilitate the recovery process. Recovery is often a successful reframing of the event, so that those people affected can make sense of it.

The opportunity for the team to predict and prepare victims for future emotional reactions is very important. Because people are not used to having such intense emotional reactions, they are unprepared for them. The crisis team educates victims that these are normal reactions that normal people have after traumatic experiences–which becomes very reassuring. In essence, the team is legitimizing the symptoms of the victims, which serves to give them control over otherwise very frightening reactions. Such education and reassurance has been most effective in reducing both workers' compensation claims and human pain and suffering.

In the past, crisis response teams used to be in the exclusive domain of police, fire and emergency service departments. Their proven effectiveness to help individuals overcome the effects of trauma, and to assist organizations reduce disability and litigation costs, has caused a growth of such programs within the private sector.

The components of a company crisis response program include: establishing pre-crisis response plans; training on-site crisis response teams; and following up with traumatized employees, family members, and affected personnel.

Understanding worksite critical incident stress reactions, crisis intervention techniques and recovery issues can enable companies to provide important assistance to employees after work-related critical incidents. ■

MIOSHA Peer Support Team

Can you imagine what it's like to be called out of bed at 1:00 a.m. to investigate a workplace fatality?

As part of our job duties, MIOSHA compliance officers investigate fatalities, explosions and major accidents resulting in death or a serious illness or injury. When investigating critical incidents, these officers are confronted with scenes of horror and destruction, as well as the pain and anguish from those involved.

Bureau administration formed the MIOSHA Peer Support Team (PST) to help compliance officers after critical investigations. The PST is a voluntary group which provides confidential, emotional support, resource information and education to their co-workers about the normal nature of stress reactions after responding to a critical incident. The PST team is composed of 13 employees. **Doug Kalinowski,** BSR Deputy Director, facilitates team activities. An outside consultant serves as the clinical coordinator, and oversees the delivery of the mental health component, and trains team members.

(Standing from L.) Lee Jay Kueppers, Doug Kalinowski, JamesBrusen, Robert Triplett, Gary Fancett, Leona Boyer, Kristin Osterkamp, Joseph Ratta, Robin Spaulding. (Sitting) Jeff Silva, Rich Starkey, James Pike, Bill Cannon.

How does the PST program work?

When a compliance officer responds to a critical incident, the PST program coordinator is notified. The coordinator assesses the nature of the critical incident, and if necessary, assigns a PST member. Once a PST member has been assigned, they contact the compliance officer within 72 hours. The PST member is available to provide emotional support, and places follow-up calls as needed. The PST doesn't diagnose, evaluate, or make assessments or recommendations. Their **confidential** role is to listen and provide support.

In addition, the PST can arrange for special meeting with the clinical coordinator for a debriefing. A debriefing is a confidential, non-evaluative discussion of the involvement, thoughts, reactions and feelings resulting from the critical incident. It serves to mitigate the stress impacts and includes educational and informational components.

To date, the PST has provided an excellent vehicle to assist compliance officers in their response to accident investigations. If you or your company are interested in learning more about the PST, feel free to contact BSR administration at 517.322.1814.

*Author: **Kristin Osterkamp** was a compliance officer for the Occupational Health Division and co-coordinator of the PST. Recently she accepted a position with Delphi Interior Systems.*

Tenneco Automotive

Cont. from Page 4

"When there is that much commitment from employees, you know the program is going to be a good one. It was amazing to see employees with such a concern for the safety of their fellow employees."

"During the onsite review, I observed the mutual trust and respect between the employees and management," said Johnson. "That relationship cultivated a work environment where health and safety are endemic."

Safety & Health Program

Management commitment to safety and health at the Grass Lake facility is an integral part of their corporate culture. Corporate leadership has established accountability for plant injury-illness rates and lost workday case rates, and has provided the resources to attain safety and health goals. Union leadership has demonstrated strong teamwork with management to ensure worker safety.

"Earning the Star designation was challenging and would not have been possible without a true team effort," said **Paul Jenkins**, Grass Lake Facility Manager. "We could not have succeeded without the help of everyone at Grass Lake, and the close cooperation between company management and union leadership."

Employee involvement is critical to Tenneco's safety success. A joint management/union safety committee coordinates safety and health activities. The committee locates unsafe equipment and conditions through inspections and initiates corrections. It also ensures that safety and health have priority over production. The plant has 225 employees (comprised of 151 salaried workers, 25 regular contract workers and 49 UAW model makers) and is represented by UAW (United Auto Workers), Local 660.

Tenneco Automotive has also implemented a Partners in Safety Awareness (PISA) Team at this site. Using a behavioral-based approach, Tenneco is able to identify "at risk" behaviors and implement training to correct the problems. Tenneco has recently formed an ergonomic team at this site.

Tenneco Automotive is a $3.3 billion manufacturing company headquartered in Lake Forest, Ill., with 24,000 employees worldwide. Tenneco Automotive is one of the world's largest producers and marketers of ride control and exhaust systems and products, which are sold under the Monroe® and Walker® global brand names. Among its products are Sensa-Trac® and Reflex™ shocks and struts, Rancho® shock absorbers, Walker® Quiet-Flow™ mufflers and Dynomax™ performance exhaust products, and Monroe® Clevite™ vibration control components. ■

Construction Safety

Cont. from Page 3

walls, the form work covering the shaft was stripped out. Thus, an opening in the new floor with a potential fall of 40 feet into the elevator pit was created.

Reasoning that the wall building crew would eliminate the fall hazard, the carpenters who stripped the form work did not construct a cover or guardrails. Unfortunately, in this scenario, the elevator shaft wall operation was late to start by two days and no one at the site took action to correct this serious exposure. Then, on the second day after the forms were stripped, two electricians began moving material into the area.

As they were walking along carrying a bundle of conduit, the electricians were engaged in a discussion about where to establish their material storage area. Neither of them was familiar with the newly constructed forth floor area so they were unaware that danger lurked just ahead. Just as they decided where to place the material, suddenly one of the electricians walked into the opening and fell to his death. A few hours later, the company safety director reached the employee's family to notify them that their loved one would not be returning home from work.

How Can We Stop It?

Events like the tragedy described above happen all too often in the construction industry. Can they be prevented? Absolutely! Let's look at each step along the way, and see how being responsible for taking the appropriate actions could result in a different outcome.

First, the carpentry contractor that stripped the form work should never have left the opening without protection. Either a cover or guardrail must be installed when any opening of this type is created. It is never a safe practice to leave a hazard for another contractor to correct.

Next, the site controlling entity such as the general contractor or construction manager on the project had a responsibility to monitor the site for hazards that may develop or be created by the subcontractors. This responsibility is mandated in the Accident Prevention Program requirement of the Part 1, General Rules Construction Safety Standard. In this case the elevator shaft opening should have been discovered during the regular walk-through of the site. In addition, subcontractor coordination meetings must always include safety and health issues. Clear policies must be established by the controlling contractor that no hazards can be left behind after any work operation, and any unsafe conditions must be reported to the designated safety person for remedial action.

Also, the subcontractor beginning work in a new area must always inspect the area for hazards before any work begins. This is also required by the Accident Prevention Program requirement and must be done even before materials are moved into the area. Multi-employer workplaces are complex and present additional hazards, but they also offer additional opportunities to identify and correct unsafe conditions.

On many construction sites in Michigan these conditions probably could not exist. Many construction companies have solid safety programs in place that are well developed and rigorously enforced. These employers have taken safety and health leadership seriously.

Sadly, however, this story in one form or another is repeated across Michigan far too often. In my "Anatomy of an Accident," several failures occurred to allow the conditions that cost a worker his life. The construction industry is still populated to a great extent by the rugged individual types who don't see the necessity of following safety and health programs. Their level of thinking hasn't crossed the line to the higher level required to view safety as an essential part of their work environment.

The problems that cause construction fatalities cannot be solved with the level of thinking that has allowed them to continue. Every construction employer must develop, coordinate with employees, and enforce–a comprehensive safety program.

Work for Better Grades

As of June 16th this year, there have been seven program-related construction fatalities in Michigan. This compares to 11 last year, 12 in 1998 and 14 in 1997. After a jump in fatalities that peaked in 1997, there is clearly a downward trend underway these last few years.

Will this downward trend continue? Will the construction industry continue to progress toward better grades in worker safety and health? I would like to think so, but I am reminded of the lesson instilled in my children during their schooling. The outcome depends on how responsibly the construction industry faces up to their problem and on how much action is applied. ■

How To Contact Us

MIOSHA Complaint Hotline	**800.866.4674**
Fatality/Catastrophe Hotline	**800.858.0397**
General Information	**517.322.1814**
Free Safety/Health Consultation	**517.322.1809**

Director	517.322.1814	Doug Earle
Deputy Director	517.322.1817	Deborah Grether
Deputy Director	517.322.1817	Doug Kalinowski

DIVISION	PHONE	CHIEF
Appeals Division	517.322.1297	Diane Phelps
Construction Safety Division	517.322.1856	Richard Mee
Consultation Education & Training Division	517.322.1809	Maryann Markham
Employee Discrimination Division	248.888.8777	Jim Brogan
General Industry Safety Division	517.322.1831	Martha Yoder
Information Division	517.322.1851	Ron Morris
Occupational Health Division	517.322.1608	John Peck
Standards Division	517.322.1845	Connie Munschy
Wage & Hour Division	517.322.1825	Bill Strong

Website: www.cis.state.mi.us/bsr

If you would like to subscribe to the MIOSHA News, please contact us at 517.322.1809 and provide us with your mailing address. Also if you are currently a subscriber, please take the time to review your mailing label for errors. If any portion of your address is incorrect, please contact us at the above number.

MI SHA news

Consumer & Industry Services
Bureau of Safety & Regulation
Director: Douglas R. Earle

MIOSHA News is a quarterly publication of the Bureau of Safety & Regulation, which is responsible for the enforcement of the Michigan Occupational Safety and Health Act (MIOSHA).

The purpose is to educate Michigan employers and employees about workplace safety and health. This document is in the public domain and we encourage reprinting.

Editor: Judith Keely Simons

Consumer & Industry Services
Director: Kathleen M. Wilbur

CIS
Serving Michigan . . . Serving You
Consumer and Industry Services

Consumer & Industry Services
Bureau of Safety & Regulation
P.O. Box 30643
7150 Harris Drive
Lansing, Michigan 48909-8143

Bulk Rate
U.S. Postage
PAID
Lansing, MI
Permit No. 1200

(15,000 copies printed at a cost of $7,500 or $0.50 per copy.)